

The background of the slide features a vintage-style map with a compass rose in the upper left corner. The map shows various geographical features and labels, though they are somewhat faded. The compass rose indicates cardinal and intercardinal directions (N, NE, E, SE, S, SW, W, NW) and includes degree markings. The overall color palette is warm and sepia-toned.

Facilitating the Establishment of Articulation between High Schools and CCCs

**Kris Costa, Articulation Liaison, SCP
Wheeler North, Faculty Coordinator, SCP
Michelle Pilati, Faculty Coordinator, C-ID**

Overview

- **Challenges**
 - Establishing High School-CCC Pathways
 - Career Technical Education (CTE)
- **HS-CCC CTE Articulation Basics**
- **Role of Statewide Career Pathways**
- **Programs of Study and Counseling Resources**
- **Student articulation processes and credit by exam – proposed resolution – vote yes!**
- **C-ID and CTE**

Establishing High School-CCC Pathways - Challenges

- Lack of guidance to students in HS
- Bias against introducing CCC as an option
- Bias against introducing CTE as an option
- Ideal: prepare students for multiple pathways
- Ensure that HS students understand that college-ready IS college-ready

CTE Challenges

- **Varied funding sources**
 - Base funding does not acknowledge differential costs (Note: Not unique to CTE)
 - Ear-marked state and federal dollars for CTE
 - Generally DON'T fund operations
 - Increasingly focused on outcomes
- **External certification/accreditation**
 - Programs may need modification to meet external demands

CTE Challenges

- Responding to industry needs
 - New program may require modification of old
 - Industry may not understand funding challenges – new programs must displace old
- HS > CCC linkages
 - People are necessary to facilitate processed
 - Recent funding changes focus on regional approach
 - How does a regional rep facilitate the maintenances of discrete HS-CCC relations?

Articulation Basics

- What is articulation?
- Why articulation versus other K12 >>> CCC transition pathways?
- What does articulation do and not do?
 - Local requirements versus credit granting
- How is articulation created and implemented
 - Agreements and processes

Statewide Career Pathways Project

- State-funded ASCCC initiative
- SB1070 (2012), Education Code § 88532.
- Established the CTE Pathways Program
- Develop and strengthen linkages and CTE pathways between HS and CCC to accomplish specified objectives
- Included separate marketing campaign
 - whodouwant2b.com

Statewide Programs of Study

- Programs of Study
 - Required to obtain Perkins funds
- Program of Study Templates
 - SCP convenes faculty to develop templates
 - PoS templates facilitate relationship discussion
 - Articulation and dual enrollment are part of PoS discussion
- Local Programs of Study are developed as a result of a local relationship between institutions

CTE PROGRAM OF STUDY: Associate of Science for Transfer, Business Administration

**Industry Sector: Finance and Business
Career Pathway: Business Management**



Levels	Grade	CTE Courses	English Language Arts	Math	Social Science	Science	Other Required Courses or Recommended Electives	Dual and/or Concurrent Enrollment	Articulated Courses (College Credit for HS Classes)	
Standard	9	Business Basics OR Business Computer Applications	English	Algebra I <input type="checkbox"/> (UC Approved Business Algebra I recommended)		Physical Science	Physical Education Digital Literacy <input type="checkbox"/>			
	Recommended Activities: Get involved in FBLA, DECA, SAGE, YEP, SCORE, or local Business Entrepreneurship Center. Job Shadow, Internship, Work Experience, or Mentorship Activities. Service Learning, Community Service Activities. Participate in Mock Interviews, Application Workshops, Career Fairs/exploration Activities. Explore Partnership Academy opportunities in high school district.									
	10	Intro to Business Concepts OR Financial Literacy	English	Math Recommended: Geometry	World History	Biological Science	Physical Education			
	Recommended Activities: Get involved in FBLA, DECA, SAGE, YEP, SCORE, or local Business Entrepreneurship Center. Job Shadow, Internship, Work Experience, or Mentorship Activities. Service Learning, Work Based Learning, Community Service Activities. Participate in Mock Interviews, Application Workshops, Career Fairs/activities. Take the SAT. Explore CTE course opportunities.									
11	Accounting I #, International Business, Finance, or VE#	English (Recommended Integrated Marketing and English)	Recommend UC Business Algebra II	US History		Foreign Language <input type="checkbox"/> Visual Performing Arts <input type="checkbox"/> (Districts may allow CTE to fulfill this)	Office Occupations <input type="checkbox"/> Business Information Systems or Computer Skills or Business Math	Accounting I Virtual Enterprise (articulates with Intro to Business)		
Recommended Activities: Get involved in FBLA, DECA, SAGE, YEP, SCORE, or local Business Entrepreneurship Center. Job Shadow, Internship, Work Experience, or Mentorship Activities. Service Learning, Work Based Learning, Community Service Activities/Organizations (Rotary Interact). Participate in Mock Interviews, Application Workshops, College and Career Fairs/exploration. Take the SAT, ACT, and college assessment tests.										
12	Accounting II #, VE#, Small Business Management, Entrepreneurship, or Business and Financial Management	(Recommend English Course or Senior Project)	Recommend UC Business Statistics	Government (semester) Economics (semester)		AP Psychology or AP Economics	Global Business, Computer Literacy, Business Law, or Financial Sales & Service	Intro to Business <input type="checkbox"/> Business Communication <input type="checkbox"/> OR Statistics OR Economics	Accounting II Virtual Enterprise (articulates with Intro to Business)	
Recommended Activities: Get involved in YEP, SCORE, or local Business Entrepreneurship Center. Job Shadow, Internship, Work Experience, or Mentorship Activities. Service Learning, Work Based Learning, Community Service Activities/Organizations (Rotary Interact). Participate in Mock Interviews, application workshops, college and career fairs/exploration. Take the SAT, ACT, and local community college placement tests in Mathematics and English, Meet with community college counselor to develop an educational plan. Get involved in the CEO club.										

This template assumes students have completed high school exit exams and basic skills coursework. Local graduation requirements may vary.

- Legend:**
- Course is recommended by industry experts
 - # Course is articulated, see comments below.
 - ★ Course may be taken via concurrent or dual enrollment
 - ② Indicates a course that may satisfy multiple requirements

Levels	Grade	CTE Courses			Additional and Optional Courses			General Education Requirements			Occupations Relating to this Pathway		
		Acct 110: Financial Acct Acct 120: Managerial Acct	...For completion of Local AS/AA Degree (total Units)	...For completion of Achievement Certificate (total units)	...For completion of Skills Certificate (total Units)	Area A English Language Communication & Critical Thinking (9 units)	Area B- Scientific Study & Quantitative Reasoning with 1 lab (9 units)	Area C Arts & Humanities (9 units)	Careers requiring a high school diploma or equivalent	Careers requiring a BA / BS degree			
Standard	13	Microeconomics and Macroeconomics				English composition	Mathematics <input type="checkbox"/>	Arts	Retail Salesperson Office Receptionist Customer Service Representative Bank Teller Accounting Clerk Cashier Entrepreneur Administrative Assistant	Business Sales Representative Corporate Trainer Risk Management Specialist HR Specialist General Operations Management Sales and Marketing Management Enterprise Management Credit Analyst Financial Advisor Commercial Lender Management Consultant Operations and Supply Chain Manager			
		Bus 12: Business Law or Bus 125: Legal Environments				Oral Communication	Physical Science	Humanities	Careers requiring some post secondary				
		Select 1 from: Business Calculus Statistics Finite Math				Critical Thinking	Life Sciences	Arts or Humanities (recommended foreign language)					
		Select 2 from: 1. Any course from above not selected 2. Business Information Systems OR Computer Skills 3 Intro to Business # OR Business Communication				Area D Social Sciences (9 units)	Area E Lifelong Learning & Self Development (3 units)	When course requirements are counted for credit in more than one area, i.e. double counted, students must complete additional transferable units to result in a cumulative total of 60 units.	Executive Assistant Bookkeeper	Careers requiring a BA/BS + (beyond the scope of this template)			
						US History	Any course in this area meets requirements (recommended)		Retail Manager/Business Management Small Business Entrepreneur Loan Officer (with Certification) Event Planner Insurance Agent (with Certification) International Trade Occupations (with certification) E-commerce	Business Director CEO/COO/VP/DO Public Relations Advertising Account Executive Certified Financial Analyst Auditor/Controller/Treasurer School Administrator			
					Political Science (American Government)	Psychology, Personal Finance, Ethics, Report writing (any course with global theme.)							
					Microeconomics <input type="checkbox"/> Macroeconomics <input type="checkbox"/>								
	15	Suggested Majors:	Business Administration						Careers requiring 2 year degree				
	16	Industry recognized certifications, Credentials, licenses, or apprenticeships related to this pathway	ROP Certificate of Competencies, MOS or IC ³ Certification, Community College Skill or Achievement Certificates, A*S*K Institute Certifications, Keyboarding Certification (local high school), SAM Certification, Recognition by business organizations - DECA, YEP, FBLA, Rotary, or Virtual Enterprise. Additional certifications available via professional organizations						Office Manager Front Office Supervisor Security and Commodity Agent Customer Service Manager Cost Estimator Purchasing/Procurement Agent Marketing/Public Relations Representative	<p>For students interested in attending a UC Campus, be aware that requirements meeting the CSU GE pattern may vary from IGETGE requirements. Students are encouraged to consult college counselor for clarification.</p>			
<p>Comments: Prerequisite requirements may vary by school and may alter the sequence of courses above. * This template is based upon requirements for CSU transfer pattern and assumes that all basic skills (remedial) coursework is completed. Courses with an emphasis in Business are recommended when they are CSU transferable. • Where there are course numbers identified, the course number references the CID course. Course content for these courses may be found at www.c-id.net/descriptors. Per Title 5, students may only receive credit for articulated high school work upon completion of a credit by exam mechanism that ensures that the objectives of the community college course have been met. Completion of an articulated course in high school does not guarantee receipt of credit at the community college.</p>													

Programs of Study include

- High School Courses
- College Coursework: C-ID Course numbers
- CTE transition activities:
 - Articulation
 - Dual Enrollment
 - Concurrent Enrollment
- College Activities
- Occupations specific to discipline
- Certifications, Degrees, Outcomes

Agreements

- **Articulation Templates**
 - SCP convenes faculty to develop templates
 - Articulation templates facilitate articulation discussion
 - Local agreements also housed in online repository
- Local agreements are generated based on approved templates between a secondary school and a post-secondary institution, usually a community college

Articulation Agreements

- Similar components to a course outline of record:
 - Course description
 - Prerequisite
 - Course Content
 - Competencies and Skills requirements
 - Measurement Methods
 - Sample Textbook
 - End of Course assessment detail is key piece

Online Counselor Tool

- Developed as a result of counselor feedback
- Programs of Study are the foundation of the tool
- Launch in late fall
- Ability to obtain student pathways data and report to CalPASS+
- [Online Counselor Tool](#)
- Provides students a plan for college

Credit By Exam (CBE)

- Articulation
 - Only waives local requirements – pre/corequisites, placement, etc.
 - Does not earn college credit – but can be the basis for allowing credit by exam (CBE)
- Credit By Exam (CBE)
 - Students complete proficiency/mastery exam for college credit.
 - Evaluation must be developed by appropriate faculty
 - Evaluation may be proctored
- Process and procedures must be clear
- White Paper on best practices available:

<http://asccc.org/publications/academic-senate-papers>

Credit by Exam Challenges

- “Credit in escrow”
- Title 5 § 55050 Credit by Exam requires:
 - “in good standing”
 - “registered”
- Title 5 § 55051 Articulation of High School Courses
 - References (sort of) 55050 for “credit by exam”
 - Proposal: separate CbE from articulated HS courses

C-ID and CTE

- C-ID
 - Course Identification Numbering System
 - Descriptors describe courses
- Transfer Model Curricula in CTE
 - “TMC”
 - 60 + 60 – response to SB 1440
- Model Curricula
 - Certificates
 - “Terminal” degrees

Current Disciplines Developing Model Curricula

- *Addiction Studies*
- *Automotive Technology*
- *Allied Health (Under review)*
- *Biotechnology*
- *Commercial Music*
- *Culinary Arts*
- *Emergency Medical Services*

Policy and advocacy

- Tech Prep/Transitions Coordinators defunded
 - Loss of local champions
 - Loss of local data collection and analysis
- Doing What Matters – Braided Funding
 - Obligation to ensure pathway progress remains
 - Sector and Consortia evaluation based on student momentum
 - State and Regional Stakeholder coordination critical
- Peripheral Legislation affecting CTE pathways

Professional Dev and Leadership

- ASCCC CTE Faculty Leadership efforts
 - Regional faculty leads with CTE, pathway and curriculum expertise.
 - Possible regional leadership activities
- CTE Stakeholders Professional Dev. Forum
 - Exchange of ideals and information
 - Improve networking across stakeholder groups
 - Facilitate and ensure faculty voice on academic and professional matters
 - Develop CTE stakeholder leadership capacity

Questions

- Thank you
- <http://www.statewidepathways.org>
- <http://whodouwant2b.com/student/pathways>
- <http://www.asccc.org/>
 - For papers and this presentation

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Statewide Career Pathways (“SB 70”) and Credit by Examination

Revised November 3, 2013 (MP)

NEW Resolution – Draft for consideration at Fall 2013 Session

F 13 Modify Title 5 Language to Include Credit by Examination Processes into §55051 *Articulation of High School Courses to Simplify the Awarding of Credit for Articulated High School Courses*

Contact Person: Wheeler North

Whereas, Many California community colleges delay the granting of credit for articulated career technical education high school courses for which credit has been earned through credit by exam (CBE) until they have completed some minimum number of units at the community college and national research suggests that the students who do not immediately receive the credit they earned while still in high school never end up taking advantage of the credit, so the intended benefits of completing an articulated course are lost;

Whereas, Articulation agreements between secondary schools or Regional Occupational Centers and Programs and California community colleges that were established under Tech Prep programs or the Academic Senate's Statewide Career Pathways: Creating School to College Articulation Project often include granting secondary students college credit through CBE, yet this credit may not be awarded for one or more years due to locally imposed residency requirements often attributed to the Title 5 provision that students must be in “good standing” and/or the requirement that students be “registered” at the college;

Whereas, The Academic Senate for California Community Colleges encourages local senates to eliminate delays to the awarding of credit for secondary students participating in legitimate articulation agreements or dual enrollment arrangements with the college; and

Whereas, A regulatory change that clarifies credit by exam requirements specific to articulated high school courses that may not be appropriate for other instances of credit by exam would permit the awarding of appropriately earned credit for articulated high school coursework without impacting other provisions for awarding credit by exam;

Resolved, That the Academic Senate for California Community Colleges support changing Title 5 regulations to explicitly separate the processes for credit by exam for articulated high school courses from other forms of credit by exam; and

Resolved, That the Academic Senate for California Community Colleges work with the Chancellor’s Office and other constituencies to modify Title 5 §55051 to stand on its own with respect to the implementation of credit by exam for articulated high school courses in a manner that removes the requirement for students to be "in good standing" and specifies that students do not need to be "registered" in any college classes or subject to any other college entry requirements as a condition of being granted this form of college credit.

Overview

The Academic Senate's SB70 initiative, Statewide Career Pathways: Facilitating School to College Articulation (SCP; statewidepathways.org), has created a system that facilitates the establishment of articulation agreements between schools (high schools and ROCs) and community colleges by bringing together CTE instructors from both segments to identify the common elements of courses that are commonly taught – leading to the development of articulation templates for courses that simplifies the dialogue between CTE instructors that is necessary to establish an articulation agreement. The templates are available on a website and the resulting agreements that are developed based on the templates are added to an online database. Through the developed infrastructure, the establishment of agreements has been simplified and the resulting agreements are made available to the public.

Despite SCP's measurable progress in the form of over 100 templates and an ever-growing list of articulation agreements, it has been reported that few students are ever awarded credit for the work completed. This is also the case nationally, according to the Community College Research Center (CCRC).

In California, in order for a student to earn transcribed community college credit for work completed at a secondary school, Title 5 regulations require that the student must complete some sort of "credit by exam" process that confirms that they have achieved the objectives of the community course articulated to as defined by community college faculty. A barrier to receiving the credit that has been identified is the delay in earning the credit that is imposed by many colleges. Many colleges impose a "residency" requirement upon their students, requiring them to complete up to 15 units at the college before being awarded credit for having achieved the competencies for a course as defined by the community college faculty. While many California community colleges have removed or decreased the "residency" requirement in recent years, some faculty and staff have voiced the need for a clear message from the Chancellor's Office that states with certainty that colleges need not impose any residency requirement for the awarding of credit as earned by "credit by exam" (see "Policies and Surveys"). We have confirmed with legal counsel in the Chancellor's Office that while colleges may *choose* to implement such a "residency" requirement, in fact there is nothing in the Title 5 regulations that requires it. Some admissions and records directors in particular have expressed concern that they were always told they had to impose a residency requirement before awarding student credit by exam.

The Statewide Career Pathways initiative has also identified another element that may impede the awarding of credit earned by secondary students for articulated courses: the requirement that the student receiving credit be "registered" at the college. Discussions in a special Admissions and Registration (A and R) subcommittee formed to address these issues arrived at the conclusion that there would be no way to award credit to a student who had not completed an application to a college – because without an application the student would have no record to which the credit could be transcribed (one college *may* have this capability, i.e., one college that is not employing a system like Banner or Datatel that mandates such actions). Due to the existing restriction that a student must be "registered", SCP is advocating for a Title 5 change that removes this requirement.

In response to concerns from the field regarding the need to ensure the integrity of credit by

exam processes for articulated high school work in advance of any simplification of the process, the ASCCC adopted a paper in Spring 2013 that was intended to address this concern by providing an overview of the elements of an effective process. The paper, *Alternative Methods for the Awarding Of College Credit: Credit by Examination for Articulated High School Courses*, is now available at <http://asccc.org/sites/default/files/AlternativeMethodsForAwardingOfCollegeCredit.pdf>

A challenge with respect to modifying the Title 5 language as it pertains to credit by exam for articulated high school work has been the need to separate the two forms of credit by exam. Presently, Title 5 § 55051 Articulation of High School Courses refers to § 55050, Credit by Examination. If, however, the language of 55051 was revised to refer to a unique regulatory section that described credit by exam uniquely for articulated high school work or such language was added to 55051, the desired changes could be made to this unique form of credit by exam without changing the nature of credit by exam more generally. It should be noted that currently 55051 references a repealed section of Title 5 (“Except through credit by examination, as defined in section 55753, high school courses may not be used to satisfy.”)

Relevant Title 5 Sections (*comments in parentheses*)

§ 55050. Credit by Examination.

- (a) The governing board of each community college district shall adopt and publish policies and procedures pertaining to credit by examination in accordance with the provisions of this section.
- (b) The governing board may grant credit to any student who satisfactorily passes an examination approved or conducted by proper authorities of the college. Such credit may be granted only to a student who is registered at the college and in good standing (*this phrase may be the source of the “residency” requirement as 12 units must be completed when a student has been placed on probation and is seeking to remediate his or her record*) and only for a course listed in the catalog of the community college.
- (c) The nature and content of the examination shall be determined solely by faculty in the discipline who normally teach the course for which credit is to be granted in accordance with policies and procedures approved by the curriculum committee established pursuant to section 55002. The faculty shall determine that the examination adequately measures mastery of the course content as set forth in the outline of record. The faculty may accept an examination conducted at a location other than the community college for this purpose. (*while the exam may be conducted elsewhere, it is the community college faculty that are ultimately charged with ensuring the integrity of the process*)
- (d) A separate examination shall be conducted for each course for which credit is to be granted. Credit may be awarded for prior experience or prior learning only in terms of individually identified courses for which examinations are conducted pursuant to this section.
- (e) The student's academic record shall be clearly annotated to reflect that credit was earned by examination.
- (f) Grading shall be according to the regular grading system approved by the governing board pursuant to section 55023, except that students shall be offered a “pass-no pass” option if that option is ordinarily available for the course.
- (g) Units for which credit is given pursuant to the provisions of this section shall not be counted in determining the 12 semester hours of credit in residence required for an associate degree.
- (h) A district may charge a student a fee for administering an examination pursuant to this

section (*fees may be charged, but are not mandatory*), provided the fee does not exceed the enrollment fee which would be associated with enrollment in the course for which the student seeks credit by examination.

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Sections 70901 and 70902, Education Code.

§ 55051. Articulation of High School Courses.

(a) For purposes of this section, the term “articulated high school course” means a high school course or courses that the faculty in the appropriate discipline, using policies and procedures approved by the curriculum committee established pursuant to section 55002, have determined to be comparable to a specific community college course.

(b) The governing board of a community college district may adopt policies to permit articulated high school courses to be applied to community college requirements in accordance with this section. Articulated high school courses may be accepted in lieu of comparable community college courses to partially satisfy:

(1) requirements for a certificate program, including the total number of units required for the certificate; or,

(2) The major or area of emphasis requirements in a degree program.

(c) Articulated high school courses used to partially satisfy certificate or major/area of emphasis requirements shall be clearly noted as such on the student's academic record. Notations of community college course credit shall be made only if community college courses are successfully completed or if credit is earned via credit by examination.

(d) Except through credit by examination, as defined in section 55753, high school courses may not be used to satisfy:

(1) The requirement of section 55063 that students complete at least 60 semester or 90 quarter units in order to receive an associate degree; or,

(2) Any general education requirement for the associate degree established by the district.

NOTE: Authority cited: Sections 66700 and 70901, Education Code. Reference: Sections 66700, 70901 and 70902, Education Code.

Relevant Academic Senate for the California Community Colleges Resolutions

21.01 F07 Residency Requirements that Delay Credit in Occupational Programs Angela Echeverri, Los Angeles Mission, Educational Policies Committee

Whereas, Many California community colleges delay granting credit for articulated occupational courses that students have taken while in high school until they have completed some minimum number of units at the community college, a practice sometimes referred to as “credit in escrow”;

Whereas, National research suggests that the students who do not immediately receive the credit they earned while still in high school never end up taking advantage of the credit, so the intended benefits of this credit are lost; and

Whereas, Articulation agreements between secondary schools or Regional Occupational Centers and Programs and California community colleges that were forged under Tech Prep programs or under the Academic Senate's new *Statewide Career Pathways: Creating School to College Articulation* Project often include granting secondary students college credit, yet locally, the credit may not be awarded for one or more years;

Resolved, That the Academic Senate for California Community Colleges encourage local senates to eliminate the practice that delays the awarding of credit to secondary students participating in legitimate articulation agreements or dual enrollment arrangements with the college.

9.05 F08 Ensuring the Integrity of Credit by Exam Processes Michelle Pilati, Rio Hondo College

Whereas, Title 5 §55050 Credit by Examination establishes the following:

- (a) The governing board of each community college district shall adopt and publish policies and procedures pertaining to credit by examination in accordance with the provisions of this section;
- (b) The governing board may grant credit to any student who satisfactorily passes an examination approved or conducted by proper authorities of the college. Such credit may be granted only to a student who is registered at the college and in good standing and only for a course listed in the catalog of the community college; and
- (c) The nature and content of the examination shall be determined solely by faculty in the discipline who normally teach the course for which credit is to be granted;

Whereas, Resolution 9.07 F07 encourages “credit faculty to consider developing credit by exam options for credit courses that have noncredit equivalents”; and

Whereas, Credit by examination processes must be developed and evaluated by the appropriate discipline faculty;

Resolved, That the Academic Senate for the California Community Colleges assert the right of discipline faculty to establish the content of credit by examination processes, including the use of exams administered at high schools and assessments based on portfolios; and

Resolved, That the Academic Senate for the California Community Colleges research and share effective practices for credit by exam processes with local senates.